

**CLEANING OF SEMICONDUCTOR WAFERS BY  
CONTAMINATE ENCAPSULATION**

**ABSTRACT OF THE DISCLOSURE**

5           An apparatus and method are provided for removing contaminate particulate matter from substrate surfaces such as semiconductor wafers. The method and apparatus use a material, preferably a liquid curable polymer, which is applied as a sacrificial coating to the surface of a substrate containing contaminate particulate matter thereon. An energy source is used to dislodge the contaminate particulate  
10 matter from the surface of the wafer into the sacrificial coating so that the particles are partially or fully encapsulated and suspended in the sacrificial coating. The sacrificial coating is then removed. The coating is preferably formed into a film to facilitate removal of the coating by pulling (stripping) the film providing a cleaner substrate surface.